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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/074,405

02/12/2002

Naoaki Komiya

YK1-0083

7025

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7590

01/16/2003

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EXAMINER

LEE, WILSON

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,405

Applicant(s)

KOMIYA, NAOAKI

Examiner

Wilson Lee

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 and 5-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Drawing

Figure 8 is objected because it should have been labeled as "Prior Art".

Claim Rejection –35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 6, "a gate line" is vague whether it is referred to the gate line shown in line 4 or another independent gate line.

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by
Komiya et al. (6,501,448).

Regarding Claim 1, Komiya discloses an organic EL pixel circuit for controlling application of a drive voltage to a plurality of organic EL pixels (See Col. 2, lines 60-65, Figure 5 and Claim 9 of Komiya), wherein a discharge transistor (TFT) is provided for discharging charges accumulated in a capacitor (70) of an organic EL element (60) (See Col. 4, line 51 to Col. 5, line 5).

Regarding Claim 2, Komiya discloses that said organic EL pixels are arranged in a matrix and the pixels in a row direction are selected by a same gate line (Gn), and said discharge transistor (30) is driven by the gate line (Gn) which is selected at a timing prior to the selection of the gate line at the row of the EL element (See Col. 3, lines 7-28, the TFT is driven before being selected) to which said discharge transistor (30) is connected, to discharge the charges accumulated in the capacitor (70) of the organic EL element (See Col. 4, line 51 to Col. 5, line 5).

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunter (6,441,560).

Regarding Claim 1, Hunter discloses an organic EL pixel circuit for controlling application of a drive voltage to a plurality of organic EL pixels (See Col. 3, lines 62-65), wherein a discharge transistor (26 and 40) is provided for discharging charges accumulated in a capacitor (36) of an organic EL element (20) (See Col. 5, lines 10-24).

Regarding Claim 2, Hunter discloses that said organic EL pixels are arranged in a matrix and the pixels in a row direction are selected by a same gate line (12), and said discharge transistor (26, 40) is driven by the gate line (12) which is selected at a timing prior to the selection of the gate line at the row of the EL element (See Col. 5, line 5-24).

Loading (selecting) the pixels is in sequence with the drive signals) to which said discharge transistor (30) is connected, to discharge the charges accumulated in the capacitor (36) of the organic EL element (See Figure 3).

Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada (6,366,025).

Regarding Claim 1, Yamada discloses an organic EL pixel circuit for controlling application of a drive voltage to a plurality of organic EL pixels (160) wherein a discharge transistor (30) is provided for discharging charges accumulated in a capacitor (SC) of an organic EL element (160) (See Col. 7, lines 19-36).

Regarding Claim 4, Yamada discloses that said organic EL pixels (160) are arranged in a matrix and each of the pixels emits light of a color which is predetermined for each pixel, and a discharge transistor for a pixel which emits light of a color (See Col. 6, line 61 to Col. 7, line 19) with a low emission efficiency is provided within a pixel which emits light of a color with a higher emission efficiency (See Col. 14, lines 7-25).

Allowable subject matter

Claims 3, 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art neither discloses nor suggests that:

the organic EL pixels are arranged in a matrix and the pixels in a row direction are selected by a same gate line, and said discharge transistor is driven by a dedicated discharge line which is activated at a timing prior to the selection of the gate line at the row of the EL element to which said discharge transistor is connected, to discharge the charges accumulated in the capacitor of the organic EL element such as required by claim 3;

each of said pixels includes a storage capacitor for holding a control voltage to be applied to a drive transistor which controls application of a drive current to the organic EL element, and each of said pixels further includes a control transistor for controlling the control voltage held in the storage capacitor to turn the drive transistor off such as required by claim 5.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yasuda (6,476,419) discloses an EL display comprising two storage capacitors being controlled by TFTs.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (703) 306-3426.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

Art Unit: 2821

Papers related to Technology Center 2800 applications may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

A handwritten signature in black ink, reading "Wilson Lee", is positioned above a horizontal line.

Wilson Lee
Patent Examiner
U.S. Patent & Trademark Office

WL
1/13/03